Sierra Club Cumberland Chapter

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RECEIVED KENTUCKY STATE BOARD ON

MAR 4 2003

ELECTRIC GENERATION AND TRANSMISSION SITING

March 3, 2003

Kentucky State Board on Electrical Generation and Transmission Siting 211 Sower Boulevard P.O. Box 615 Frankfort, Kentucky 40602

Re: Site Assessment for Kentucky Pioneer Energy. Case#2002-00312.

Dear Members of the Siting Board,

I am writing on behalf of the 4500 members of the Cumberland (Kentucky) Chapter of the Sierra Club. Approximately a third of our members live within 30 miles of the proposed power plant in Trapp, Kentucky. We are extremely concerned about this facility, and urge you to deny the certificate for construction. We believe that the siting analysis that has been conducted so far is incomplete, seriously lacking in key details, and inadequate to meet the requirements of KRS 278.

The siting assessment is primarily based on the Environmental Impact Study (EIS) conducted by the U.S. Department of Energy (DOE)2. The EIS is woefully inadequate. The study lacks sufficient information about the proposed technology to assess its viability or the nature of its byproducts. How is it possible to do a study of environmental impacts if the impacts are unknown? The Sierra Club has previously voiced serious concern about the power plant and the EIS, and I would like to attach our prior comments to this letter for the record.

Even if the DOE's EIS were to be accepted as the starting point for the siting analysis, the siting assessment report is still incomplete and lacking in many key aspects. In the following paragraphs, we discuss these shortcomings in detail.

Testing and Handling of Frit

At this point, nobody knows the nature of the byproducts of the municipal waste plus coal gasification. This fact is noted in the site assessment report submitted by Jason Associates³:

¹ Review and evaluation of: A site assessment report for Kentucky Pioneer Energy case number 2002-00312. Prepared by Jason Associates Corporation, South Carolina. February 7, 2003.

² Kentucky Pioneer integrated gasification combined cycle demonstration project final environmental impact statement (DOE/EIS-0318). U.S. Department of Energy. November, 2002.

"The Final EIS stated that KPE (Kentucky Pioneer Energy) will verify the actual frit material resulting from the co-feed of coal and RDF (Refuse Derived Fuel) to be non-hazardous prior to tree-release as a marketable product. Otherwise, KPE will either adjust the gasification process to make the material non-hazardous, use a coal-only gasification, or be responsible for proper disposal of the material as hazardous waste." (Page C-3).

Despite this uncertainty about the frit, the site assessment report requires that the frit be tested only once⁴. If the frit is pronounced to be non-hazardous after this test, it will be sold to unsuspecting buyers as a safe product. This will continue throughout the life of the power plant and there will be no further assessment. This is of grave concern because there will be no quality control in the generation of the RDF, whose composition can change from one batch to the next. Indeed, as noted below, KPE asserts that even industrial waste might be part of the mix. We feel that the frit needs to be tested repeatedly at regular intervals and whenever there is any suspicion of a change in the feed material in order to protect the health and safety of people and the environment.

Also, the siting assessment is inadequate in its analysis of the nature of the handling process for this frit. No information is provided about how this material will be managed if it is found to be hazardous. The Siting Board should require KPE to provide a detailed account of the disposal plan for this potentially hazardous material. Unless this is done, this siting analysis will be inadequate to meet the requirements of KRS 278.

The Ratio of RDF to Coal

In responding to an information request from the Public Service Commission, KPE stated the following:

"The ... coal to RDF ratio can vary and will depend upon economic considerations, component qualities, and desired performance. Kentucky Pioneer Energy anticipated a ratio ranging from 2:1 to 1:1 RDF to coal." 5

All of the analyses that have been conducted, including DOE's EIS and the siting analysis, have erroneously used the low end of the RDF to coal ratio, whereas KPE intends for this ratio to be only the starting point and will be using proportionally more RDF than coal in the future. This means, for instance, that more train loads of RDF will be brought into the Trapp community than assumed by the Siting Board, the storage and handling facilities will have to be bigger, and so on. The siting analysis needs to be reworked to examine how the use of more RDF will impact transportation, noise level, handling facilities, and the land-use patterns around this plant if KPE, as stated, uses proportionally more RDF than assumed.

³ Review and evaluation of: A site assessment report for Kentucky Pioneer Energy case number 2002-00312. Prepared by Jason Associates Corporation, South Carolina. February 7, 2003. Page C-3.

Ibid. Page C-3.
East Kentucky Power Cooperative, Inc. PSC Case No. 2000-079. Information Request Response #5. June 9, 2000.

Failure to Analyze Impact of Transmission Line

The siting analysis does not address the transmission line that is an inherently part of the project. A 27-kilometer transmission line, with a 40 to 45 meter wide right of way, will be built in conjunction with this plant. The impact of the complete power generation operation in terms of environmental, cultural, aesthetic, and land-use values cannot be evaluated without the analysis of how the transmission lines affect these factors. The siting assessment report states that the impact of the transmission line will be evaluated in the future when EKPC applies for financial assistance to build the lines. However, it is not clear when or if EKPC will apply for these funds. A certificate of construction should only be provided when all components of the power plant have been proposed in complete detail and the siting impacts of the all these components have been evaluated. Provision of a certificate without the analysis of the impacts of the transmission line will thus be premature.

Incomplete Information about the Actual Location of the Power Plant

The siting analysis is vague as to the exact location of the power plant within the EKPC property. Several streams and the Kentucky River either are on this property or form its boundary. Without knowing where the plant will be sited in relation to these valuable water resources, it is impossible to ascertain how the construction and operation of the power plant will affect them. The siting assessment is incomplete without these specific details and the relevant analyses.

Industrial Waste in RDF

KPE states that, "Waste from an industrial facility may or may not be excluded from the MSW (municipal solid waste) stream." The siting assessment report is completely silent on this issue. The siting assessment must incorporate the implications of industrial waste in the RDF, including whether there will be a need for special handling facilities to manage the RDF and the vitrified frit that could result from the use of industrial waste as fuel.

Failure to Obtain the Necessary Permits from Local Authorities to Import Municipal Waste KRS 278 states that the construction certificate will be valid only after all necessary permits are issued to a merchant power plant. KPE has refused to let the local government in Clark County decide whether it will be allowed to bring in a million or more tons of garbage/year into its facility. This directly contradicts KRS 224.40, which requires facilities like the proposed power plant to obtain a determination of consistency from the solid waste management governing body of the county into which solid waste fuel will be imported to generate power. Unless and until KPE obtains the determination from Clark County officials, no construction certificate should be provided.

In summary, the siting analysis of the proposed Trapp power plant is incomplete and inadequate to meet the requirements of KRS 278. Many key aspects of the power plant, including the

⁶ Kentucky Pioneer integrated gasification combined cycle demonstration project final environmental impact statement (DOE/EIS-0318). U.S. Department of Energy. November, 2002. Page 4-2.

⁷ Review and evaluation of: A site assessment report for Kentucky Pioneer Energy case number 2002-00312. Prepared by Jason Associates Corporation, South Carolina. February 7, 2003. Page C-9.

⁸ Ibid. Page C-5.

⁹ Kentucky Pioneer Energy's written responses to questions raised at the Subpart Eb Siting Analysis public meeting on June 28, 2001. Page 8.